

### **REMARKS**

In the Office Action, the Examiner rejected: (1) claims 1, 2, 14-17, 22-26, and 31-33 under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter that Applicant regards as the invention; (2) claims 1-2 and 31-32 under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 2,464,028 (Danner) in view of U.S. Patent No. 6,679,085 (Singer); (3) claims 1, 14-17, 22-24 and 31 under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 3,236,619 (Frye) in view of Singer; (4) claim 22 under 35 U.S.C. §103(a) as being unpatentable over Frye in view of Singer as applied to claims 14 and 23, and further in view of U.S. Patent No. 6,595,029 (Dick 1); (5) claims 25 and 26 under 35 U.S.C. §103(a) as being unpatentable over Frye in view of Singer as applied to claims 14 and 23 and further in view of U.S. Patent No. 3,364,004 (Cozine); and (6) claim 33 under 35 U.S.C. §103 as being unpatentable over Frye in view of Singer and U.S. Patent Publication No. 2004/0025540 (Dick 2). Applicant responds as follows:

#### **1. Response to Rejection Under 35 U.S.C. § 112, ¶ 2**

The Examiner rejected claims 1, 2, 14-17, 22-26 and 31-33 under 35 U.S.C. § 112, ¶ 2 as being indefinite for failing to particularly point out and distinctly claim the subject matter that Applicant regards as the invention. The Examiner noted that in claims 1, 31 and 33 as previously written, there was an ambiguity as to whether the outer wall and the inner self-supporting structures are made of different materials. Applicant expresses no opinion as to the merits of the rejection, but in the interests of furthering prosecution, has amended claims 1 and 33 (and canceled claims 31 and 32) to clarify that only the outer wall is limited to being a dispersion strengthened platinum alloy. The inner-supporting structure may comprise any metal material. In view of these amendments, claims 1 and 33, as well as the claims that depend on them, comply with Section 112 of Title 35.

**2. Response to Rejection Under 35 U.S.C. § 103(a)**

The Examiner rejected claims 1-2 and 31-32 under 35 U.S.C. §103(a) as being unpatentable over Danner in view of Singer. Applicant expresses no opinion as to the merits of the rejection, but notes that he has amended claim 1 to recite the presence of both at least one strut and at least one annular ring and canceled claims 31 and 32. The cited art does not disclose this combination of features. Therefore claim 1 and claim 2, which depends on claim 1, are patentable over the cited art.

**3. Response to Rejection Under 35 U.S.C. § 103(a)**

The Examiner rejected claims 1, 14-17, 22-24 and 31 under 35 U.S.C. §103(a) as being unpatentable over Frye in view of Singer. Applicant expresses no opinion as to the merits of the rejection, but notes that he has amended claim 1 to recite the presence of both at least one strut and at least one annular ring and canceled claim 31. The cited art does not disclose this combination of features. Therefore, claim 1 and the claims that depend on it are patentable over the cited art.

**4. Response to Rejection Under 35 U.S.C. § 103(a)**

The Examiner rejected claim 22 under 35 U.S.C. §103(a) as being unpatentable over Frye in view of Singer as applied to claims 14 and 23, and further in view of Dick 1. Claim 22 depends on claim 1, and the Examiner has not identified where Dick 1 discloses the features noted above as missing from claim 1. Therefore, for at least the reasons provided above, claim 22 is patentable over the art of record.

**5. Response to Rejection Under 35 U.S.C. § 103(a)**

The Examiner rejected claims 25 and 26 under 35 U.S.C. §103(a) as being unpatentable over Frye in view of Singer as applied to claims 14 and 23 and further in view of Cozine. Claims 25 and 26 depends on claim 1, and the Examiner has not identified where Cozine discloses the features noted above as missing from claim 1.

Therefore, for at least the reasons provided above, claims 25 and 26 are patentable over the art of record.

#### **6. Response to Rejection Under 35 U.S.C. 103(a)**

The Examiner rejected claim 33 under 35 U.S.C. §103(a) as being unpatentable over Frye in view of Singer and Dick 2. Applicant expresses no opinion as to the merits of the rejection, but note that he has amended claim 33 to recite the presence of both at least one strut and at least one annular ring. The cited art does not disclose this combination of features. Therefore, claim 33 is patentable over the cited art.

#### **7. New Claims**

Applicant has added new claims 34-37. New claim 34 recites the presence of a thermal layer inside the metal jacket and depends on claim 1. Support for this claim appears in paragraphs [0008] and [0030]. New claim 35 depends on claim 34 and recites that the thermal insulation material has a different thermal expansion coefficient from that of the metal jacket. Support for this claim appears in paragraph [0008] of the specification. Because these claims depend on claim 1, for at least the reasons that claim 1 is patentable over the art of record, new claims 34 and 35 are patentable over it as well.

New claim 36 is an independent claim and has the features of previously pending claim 1 and new claim 34. New claim 37 depends on claim 36 and recites that the thermal insulation material has a different thermal expansion coefficient from that of the metal jacket. Support for this claim appears in paragraph [0008] of the specification. Applicant respectfully submits that none of the art of record, either alone or in combination discloses the recited thermal layer in combination with the other recited features. Therefore, claims 36 and 37 are patentable over the cited art.

#### **Conclusion**

Based on the foregoing, Applicant requests reconsideration and allowance of all claims.

Applicant believes that no fees are due at this time other than the fee for the Request for Continued Examination. However, if any fees are necessary, please charge Deposit Account No. 11-0171 for such sum. If the Examiner has any questions regarding the present application, the Examiner is cordially invited to contact Applicant's attorney at the telephone number provided below.

Respectfully submitted,

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